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ENGINEERING-SCIENCE, INC.
1700 Broadway, Suite 900 Denver, Colorado 80290
phone: (303) 831-8100 • telecopy (303) 831-8208

MEETING NOTES

TO: Distribution **DATE:** April 26, 1994

FROM: Philip Nixon **PROJECT:** Solar Pond IM/IRA

MEMO #: SP307:042694:01

ATTENDANCE:

Dave Ericson, EG&G
Steve Howard, DOE/SMS
Phil Nixon, ES
Lee Pivonka, G&M
Harlen Ainscough, CDH
Shaleigh Whitesell, PRC
John Haasbeek, ERM
Arturo Duran, EPA
Mark Austin, EG&G
Scott Surovchak, DOE
Steve Paris, EG&G

DISTRIBUTION:

L. Benson, ES
A. Conklin, ES
K. Cutter, ES
S. Stenseng, ES
A. Fricke, ES
T. Kuykendall, ES
T. Evans, ES
B. Cropper, ES
C. Montes, ES
R. McConn, ES
W. Edmonson, ES
R. Popish EG&G (Admin. Record) (2)
S. Hughes, ES
K. London, EG&G
Jesse Roberson, DOE
Helen Belencan, DOE
John Evans, ES
Randy Ogg, EG&G
Cindy Gee, ES
Dave Myers, ES
Richard Henry, ES
Rick Millikin, ES
Steve Cooke, EG&G
Joe Schieffelin, CDH
S. Winston, ES
Kim Ruger, EG&G
Michelle McKee, EG&G
Marcia Dibiasi, IGO
Rich Stegen, ES
Bob Siegrist, LATO
Kevin Loos, DOE
Frazer Lockhart, DOE
Toni Moore, EG&G
Will Barnard, ES
Alan McGregor, ERM
Ted Kearns, DOE/KMI
Pat Breen, ES
Peg Witherill, DOE
Steve Keith, EG&G
John Rampe, DOE
John Hicks, ES
Bob Glenn, ES
Rick Wilkinson, ES
Ron Schmiermund, ES
Marc Hill, ES
Central Files

SUBJECT: Weekly Status Meeting

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1. Review of Meeting Minutes

It was discussed that dispositioning the impacted OU4 and annexed OU9 Original Process Waste Lines beneath the engineered cover may not be an issue. However, the general topic of consolidating debris beneath the engineered cover is an open issue that will be on the agenda for a meeting between the DOE, CDH, and EPA which has been scheduled for May 11, 1994.

Arturo Duran indicated that EPA/PRC was evaluating the concept of lowering the subsurface drainage layer to the elevation of the mean of the seasonal high water table elevation in comparison to a low permeability (liner) system. It was agreed that the design of the subsurface drainage layer should include a justification for the use of this system as opposed to a subsurface liner system. In addition, the design should justify the selected location for the subsurface drainage layer.

2. Submittal of PCOCs for the Next Revision of the IM/IRA-EA

Phil Nixon specified that ES had re-run the statistics to address comments which had been received and to update the previous results with respect to additional data and validation results. Becky Cropper specified that approximately 30,000 additional records had been included or updated (this includes a combination of new data and validation results) since the original PCOCs had been calculated in October 1993.

Becky Cropper indicated that in general the same statistical methodology was used to calculate the Potential Constituents of Concern (PCOCs); however, the preliminary data base screening methods had changed. An evaluation of the historical data was performed to assess whether the historical data was appropriate for use in conjunction with the Phase I RFI/RI data. This analysis included assessing the reliability of the historical data (lab qualifiers, detection limits, etc.) and the similarity of the data bases. In addition, all the Phase I RFI/RI data was used in the determination of the PCOCs (the location screen was not performed). This change was made to address the comments concerning why the Part II and Part III data bases were different. ES will move the statistical evaluation discussion from Part III of the IM/IRA-EA decision document to Part II so that only one data base will be used (RFI/RI data base).

Steve Paris pointed out that the removal of the location screen could impact the PRG calculations because PCOCs and ultimately Constituents of Concern (COCs) could be included that were found outside the OU4 remediation area. Phil Nixon responded that the location screen would be conducted after the determination of the COCs. Any COC that was included for OU4 remediation that was only identified from data outside the OU4 boundary would be removed

from the COC list and the PRGs for contaminants impacting the same target organs as the removed COC would be re-calculated. Therefore, the COC and PRG calculations will address only those constituents that exist in the OU4 area.

The attached list specifies the PCOCs that were identified. It was agreed that only these constituents will be mapped in Part II to demonstrate the results of the OU4 RFI/RI. The health risk assessment and identification of areas for remediation will be retained in Part III and Part IV. Harlen Ainscough specified that Calcium, Silicon, and Potassium did not require detailed mapping because they were common inorganic nutrients/constituents.

3. Final Comments on the Post-Closure Monitoring Plan

Harlen Ainscough provided the final CDH comments on the Part IV Post Closure Monitoring plan to ERM/Geraghty and Miller. Harlen also specified that CDH considers that the proposed system has a technical value in assessing the performance of the engineered cover system. There were no comments that merited significant discussion or clarification.

4. Open Issues

Arturo Duran stated that the EPA is still requesting that DOE conduct soil leachability studies even though the decision has been made to excavate contaminated soils beneath the Solar Evaporation Ponds for disposition above the subsurface drainage layer. Arturo specified that this activity should be conducted in parallel to the design because this information could be very useful in addressing the concerns that the public might raise. It was agreed that this issue will be discussed at the next team meeting to determine the appropriate test/methodologies for the desired use of the data. DOE wants to make sure that this is an appropriate expenditure of funding.

Philip A. Nixon

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Comparison of Background Representative Concentration to RFI/RI Representative Concentration

	Background 95% UCL/UTL	RFI/RI 95% UCL/UTL
Surficial Soil		
Americium-241 (pCi/g)	0.027	26.24
Cesium-134 (pCi/g)	ND	0.04
Gross alpha (pCi/g)	22.9	40.51
Plutonium-239,240 (pCi/g)	0.062	14.22
Tritium (pCi/L)	ND	2604.94
Uranium-233,234 (pCi/g)	1.22	14.29
Uranium-235 (pCi/g)	0.09	0.163
Uranium-238 (pCi/g)	1.27	9.66
Beryllium (mg/kg)	0.92	3.98
Cadmium (mg/kg)	0.64	172.1
Calcium (mg/kg)	8282.95	28733.23
Mercury (mg/kg)	0.03	0.17
Nitrate/Nitrite (mg/kg)	1.11	595.62
Silicon (mg/kg)	202.7	3811
Silver (mg/kg)	0.58	2.19
Sodium (mg/kg)	165.4	1274.36
Benzo(a)anthracene (ug/kg)	--	830.29
Benzo(a)pyrene (ug/kg)	--	881.44
Benzo(b)fluoranthene (ug/kg)	--	371.31
Benzo(ghi)perylene (ug/kg)	--	657.34
Benzo(k)fluoranthene (ug/kg)	--	422.5
Bis(2-ethylhexyl)phthalate (ug/kg)	--	8129.91
Chrysene (ug/kg)	--	946.1
Di-n-butyl phthalate (ug/kg)	--	713.18
Fluoranthene (ug/kg)	--	374.58
Indeno(1,2,3-cd)pyrene (ug/kg)	--	712.54
Phenanthrene (ug/kg)	--	381.55
Pyrene (ug/kg)	--	386.04
Aroclor-1254 (ug/kg)	--	3251.4
Vadose Zone Soil		
Americium-241 (pCi/g)	0.01	3.32
Cesium-134 (pCi/g)	ND	0.0098
Cesium-137 (pCi/g)	0.166	0.05
Gross beta (pCi/g)	27.99	30.68
Plutonium-239,240 (pCi/g)	0.02	6.74
Radium-226 (pCi/g)	0.65	1.44
Strontium-89,90 (pCi/g)	0.54	0.475
Tritium (pCi/L)	212.2	35778.38
Uranium-233,234 (pCi/g)	0.53	3.23
Uranium-235 (pCi/g)	0.1	0.14
Uranium-238 (pCi/g)	0.63	6.66
Barium (mg/kg)	93.87	108.4
Cadmium (mg/kg)	2.3	163.06
Calcium (mg/kg)	7781.79	67187.44
Lithium (mg/kg)	83.2	14.26
Manganese (mg/kg)	190.5	238.92
Nitrate/Nitrite (mg/kg)	7.1	1873.4
Potassium (mg/kg)	1562.86	2884.43
Sodium (mg/kg)	2720	1863.7
Sulfide (mg/kg)	43000	41.17
Zinc (mg/kg)	23.64	4.74
2-butanone (ug/kg)	--	29
Acetone (ug/kg)	--	69.92
Bis(2-ethylhexyl)phthalate (ug/kg)	--	220
Chloroform (ug/kg)	--	12.5
Di-n-butyl phthalate (ug/kg)	--	220
Methylene chloride (ug/kg)	--	30.56
Toluene (ug/kg)	--	211.9
Cyanide (mg/kg)	--	15.93